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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/955,548      | 09/17/2001  | Akira Kibashi        | JP920000200US1      | 9802             |

7590 09/19/2005  
IBM Corporation  
Intellectual Property Law  
5600 Cottle Road (L2PA/0142)  
San Jose, CA 95193

EXAMINER

PATEL, GAUTAM

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2655

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/955,548

Applicant(s)

KIBASHI ET AL.

Examiner

Gautam R. Patel

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1 and 3 are pending for the examination.

### **RCE STATUS**

2. The request filed on 8-1-05 for Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application is acceptable and a RCE has been established. An action on the RCE follows.

### **NOTES & REMARKS**

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. For example page 10 last line "process in necessary" may be should read "process is necessary", Applicant's cooperation is requested in correcting any errors of which Applicant may become aware in the specification.

### **Claim Rejections - 35 U.S.C. § 103**

4. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Arai et al., US. patent 6,169,710 (hereafter Arai) in view of Motoyama et al., US. patent 6,301,670 (hereafter Motoyama).

As to claim 1, Arai discloses the invention as claimed [see Figs. 1-3] including a reader/writer, a determiner, a retry commander and a data overwrite logic, comprising:

a reader/writer [fig. 1, unit 3] for reading and writing data from/to a storage medium [optical disc] [col. 2, lines 28-37];

a determiner [fig. 1, unit 3] for determining whether data can be successfully read by said reader/writer;

a retry commander [fig. 1, unit 3] for commanding said reader/writer to retry to read the data if said determiner determines that the data read operation can be unsuccessful; and

a data overwrite logic [fig. 1, unit 3] for overwriting the storage medium with the read data if a command has been issued a predetermined number of times or more by said retry commander when the data read operation is determined to be successful by said determiner [col. 2, line 28 to col. 3, line 23].

Arai discloses all of the above elements, including a data saving logic [fig. 1 unit 3] for saving data to be overwritten in a memory [fig.1, unit 4] [col. 2, line 28 to col. 3, line 23]. Arai is silent about of the memory section where data is saved, such as nonvolatile memory or ROM. Also Ari does not disclose data is overwritten on the same track or sector to the extent claimed.

However, use and application of nonvolatile memory or ROM is very well known in the art for very long time [for example Intel computer architecture] and almost all newer system has these feature on the disc to save ID, control functions etc. And “overwriting” by definition is defined as writing data to the same sector or track. **And overwriting to same sector when read retry threshold exceeds certain threshold is also well known for a long time [see col. 110, lines 14-35; Schell et al. US Patent 5,796,703].**

Also Motoyama clearly discloses:

the function of overwrite the same data sectors or track which originally stored said read data [col. 6, lines 55-58]; and

a data saving logic [fig. 2, unit 204] for saving data to be overwritten to a nonvolatile memory [fig. 2, unit 202] before the data is overwritten by said overwrite logic [col. 6, lines 45-58].

Both Arai and Motoyama are interested in erasing and writing the data when a problem is identified.

One of ordinary skill in the art at the time of invention would have realized that the system of Arai would have been sensitive to noise that is associated with RAM type memory and it may destroy sensitive data while trying to write another data on the disk, and it would be

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useful to have a portion of the memory allocated as nonvolatile memory to save important and/or old data.

Therefore, it would have been obvious to have used a nonvolatile memory and overwrite data to the same location in the system of Arai as taught by Motoyama because one would be motivated to prevent destruction of important data, and provide more secure overwrite operation for data recovery in the system of Arai and provide better reliability and for over all operation of the system [col. 6, lines 45-55; Motoyama].

5. The aforementioned claim 3, recites the following elements inter, alia disclosed in Arai:

a pointer information changer [ID changer, fig. 1, unit 3] for changing the pointer information which points to the storage location of the data to be read on the storage medium after the data was saved by said data saving logic or overwritten by said data overwrite logic [col. 3, line 55 to col. 4, line 20].

6. Applicant's arguments with respect to claims 1 and 3 have been considered but are moot in view of the new grounds of rejection.

#### **Other prior art cited**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Schell et al. (US. Patent 5,796,703) "Apparatus for .....".

#### **Contact Information**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

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The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is 703-872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Wayne Young can be reached on (571) 272-7582.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.

  
**GAUTAM R. PATEL**  
**PRIMARY EXAMINER**

Gautam R. Patel  
Primary Examiner  
Group Art Unit 2655

September 14, 2005